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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,819	06/08/2005	Chisato Kemmochi	SON-2784	7284
23353 7590 12/07/2007 RADER FISHMAN & GRAUER PLLC LION BUILDING 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036			EXAMINER DEBERADINIS, ROBERT L	
			ART UNIT 2836	PAPER NUMBER
			MAIL DATE 12/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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**Office Action Summary**

Application No.

10/516,819

Applicant(s)

KEMMOCHI ET AL.

Examiner

Robert DeBeradinis

Art Unit

2836

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br/>Paper No(s)/Mail Date <u>12/7/04, 3/16/06, 5/23/07</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)<br/>Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|--|--|

## **DETAILED ACTION**

### ***Drawings***

Figures 1,2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by

KRAKER 4,860,238

CLAIMS 1,7,10

KRAKER discloses a waveform generating apparatus adapted for generating a periodical waveform on the basis of an inputted feature quantity, the waveform generating apparatus including: detecting means (x(0) input) for detecting the inputted feature quantity; oscillating means (f) for computing a

recurrence formula with at least two sample points being as initial values on the basis of the feature quantity detected by the detecting means to thereby generate the periodical waveform; and output means (R2) for outputting the periodical waveform generated from the oscillating means.

#### CLAIMS 2,8,11

KRAKER discloses the waveform generating apparatus as set forth, in claim 1, wherein the periodical waveform is a sine wave, whereby in the case where value of a sine wave signal at an arbitrary time point of  $n$  is  $Y[n]$ , when phase and frequency of the sine wave to be outputted are given as the feature quantity,  
 $Y[0] = A \sin(\text{phase angle})$   
 $Y[1] = A \sin(\omega t + \text{phase angle})$   
are used as initial values  $Y[0]$ ,  $Y[1]$ , and a formula expressed below in which value  $Y[n+2]$  of a sine wave signal at a time point of  $n + 2$  is represented by value  $Y[n+1]$  of a sine wave signal at a time point of  $n = 1$  AND A VALUE OF A SINE WAVE AT A POINT  $N$ ,

$$Y[n+2] = 2 \times A \cos(\omega t) + Y[n+1] - Y[n]$$

is used as the recurrence formula (COL.1, lines 60-65).

#### CLAIMS 3,9

KRAKER discloses the waveform generating apparatus used for sine wave synthesis of a decoder supplied with encoded data including feature quantity obtained by performing sine wave analysis of a time series signal every encoding frame, the waveform generating apparatus as set forth in claim 1, wherein the feature quantity is periodically given every the encoding frame, and a sine wave signal from the oscillating means is stored into storage means by the one frame to output the stored sine wave signal through the output means (col. 3, lines 53-63).

#### CLAIM 4,5,6

KRAKER discloses the waveform generating apparatus as set forth in claim 1, wherein plural oscillating means are used as the oscillating means to sequentially generate respective sample points of time series order of the periodical waveform by the plural oscillating means (fig. 2).

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10/516,819  
Art Unit: 2836

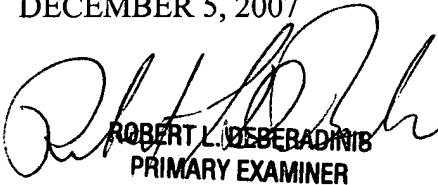
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Any inquiry concerning this communication should be directed to Robert L. DeBeradinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Sherry, can be reached on (571) 272-2058. The Fax phone number for this Group is (571) 272-8300.

RLD

DECEMBER 5, 2007

  
ROBERT L. DEBERADINIS  
PRIMARY EXAMINER